

The Impact of Bankruptcy Probability on the Stock Prices of Jordanian Industrial Corporations: An Empirical Study

2013

أثر احتمالية الإفلاس على أسعار أسهم الشركات المساهمة العامة الصناعية الأردنية: دراسة تحليلية

The Impact of Bankruptcy Probability on the Stock Prices of Jordanian Industrial Corporations: An Empirical Study

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وافق عليها

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2013

قال الله تعالى~ وقُلْ رَبِّ زِدْنِي عِلْمًا [طه : 114]

[illegible]

[illegible]	[illegible]
ج	[illegible]
د	[illegible]
ه	[illegible]
ز	[illegible]
ح	[illegible]
ط	[illegible]
1	[illegible]
2	**1.1** [illegible]
3	**2.1** [illegible]
4	**3.1** [illegible]
5	**4.1** [illegible]
6	**5.1** [illegible]
7	[illegible]
8	**1.2** [illegible]
8	**2.2** [illegible]
9	**3.2** [illegible]
10	**4.2** [illegible]
12	**5.2** [illegible]
21	**6.2** [illegible]
25	[illegible]
26	**1.3** [illegible]
26	**2.3** [illegible]
34	**3.3** [illegible]
35	[illegible]
36	**1.4** [illegible]
36	**2.4** [illegible]
37	**3.4** [illegible]

üNjƐƣƜǁƐ ƕƊǏƏƑƼ

5ΘŭDŽǁɛ ƕDŽǝƑƺ

[illegible]

[illegible]

1.1

.(Pongsatat et al., 2004)

2.1 [illegible]

[illegible] (1976) Jensen and Meckling [illegible]

[illegible] (Altman, 1968) [illegible] Kida [illegible] (1982) Ohlson [illegible] (1980) Shirata [illegible] (1980) [illegible] (Systimatic Risks) [illegible] (Fama,1970) [illegible]

[illegible]

:[illegible]

1. [illegible] (SHIRATA) [illegible]
[illegible] (SP) [illegible]

2. [illegible]
[illegible] (PE) [illegible] (SP) [illegible]

3. [illegible]
(PB) [illegible] (SP) [illegible]

4. [illegible] (CSZ) [illegible]
(SP) [illegible]

3.1 [illegible]

:[illegible]

1. [illegible] (SHIRATA) [illegible]
.[illegible] (SP) [illegible]

2. [illegible]
[illegible] (PE) [illegible] (SP) [illegible]
.[illegible]

3. [illegible] (PB) [illegible]
.[illegible] (SP) [illegible]

.4 [illegible] (CSZ) [illegible] (SP)

[illegible].

4.1 [illegible]

[illegible] %17.02 [illegible] %90 [illegible] 2011 [illegible] %15 [illegible] %1.4 [illegible] 2009 [illegible] %2.6 [illegible] 2010 [illegible] %17.6 [illegible] 2009 [illegible] 2011).

[illegible]

5.1

Ĭ ďžƑƙǁ ü T ƻǁ

ƕ ƨ Ƹ ƥ ơ ǂ ă ƥ ư ďǁ ƥ Ƒ Ư Ǖ

Ɨ ďžƥ ǀ ďž 1.2

Σ ǖ 5 Ǘ ƒ Ǳ Ă ǌ ǆ 2.2

Ƙ Ǵ ǂ Ƨ T ! ƒ Σ ǖ 5 Ǘ Ɨ ŏ ʅ ŏ Ƒ Ƨ ! ƒ Ɣ ǵ ʅ Ǖ ƒ 3.2

Ƙ Ǵ ǂ Ƨ T ! ƒ Ǵ ǌ ƕ Ƨ ďžƙ Ǒ ƙ ! ƒ Σ ǖ 5 Ǘ ƒ Ƙ ƒ Ƨ T ƌ ďž Ă ý ơ ƒ Ƨ ďž 4.2

Σ ǖ 5 Ǘ ƒ Ɨ ŏ ! Ǵ ďž ƙ ơ ƕ ƌ ƕ Ǉ ƙ ! Ɨ ŏ ! Ǵ ďž ! ƒ Ɯ Ʀ Ǵ ďž Ǉ ! ƒ Ǳ Ǌ 5.2

Ƙ Ǵ ǂ Ƨ T ! Ɨ ŏ ! Ǵ ďž ! ƒ ǀ Ǘ ǖ ďž ! ƒ Ɨ ƶ ƕ Ǵ ƙ ďž Ǒ 5 Ǉ ƥ Ƨ Ǖ ƒ Ǒ 5 Ɨ ŏ ďž Ă ǂ ơ ! ƒ Ƙ Ǵ ǌ ƞ ! ƒ Ƨ Ă ƥ 6.2

1.2

(2007),Oluwo

(2000) Pongstat *et al.*,

(2005) Pompe and Bilderbeek

2.2

3.2

:(1993

.(Ross and Jaffe, 2008)

(2001

.(1997

.(2011

4.2

Fitzpatrick (1934)

.1

.2

3.

4.

5.

(1987) .

(2011)

1.

2. [illegible]

3. [illegible]

4. [illegible]

5. [illegible]

6. [illegible]

5.2 [illegible]

[illegible]

[illegible] Smith and Winakor (1930) [illegible] .1 [illegible] .2 [illegible] .3 [illegible] .4 [illegible]

[illegible] (1934) Fitzpatrick [illegible]

[illegible] 20 [illegible] 13 [illegible]

[illegible] 20[illegible]

[illegible]

[illegible] .1 : [illegible] .2 [illegible] .3 [illegible] .4 [illegible] .5 [illegible]

[illegible] (1966) Beaver [illegible]

[illegible] .1 : [illegible] .2 [illegible] .3 [illegible] .4 [illegible] .5 [illegible] .6 [illegible]

[illegible] Beaver [illegible]

[illegible]

[illegible]

[illegible] (1968) Altman [illegible]

[illegible] Altman [illegible]

[illegible] Z-Score [illegible]

[illegible]

$$Z = 1.2X1 + 1.4X2 + 3.3X3 + 0.6X4 + 1.0X5$$

[illegible]:

(X1) = [illegible]

(X2) = [illegible]

(X3) = [illegible]

(X4) = [illegible]

(X5) = [illegible]

Z = [illegible]

[illegible]:

- [illegible]

1. 2.99 <
2. 2.99-1.81
3. 1.81 >

- 2.99
- 1.81
- 2.99 -1.81

(Atman,1968)

2.675

Altman

85% 95%

Altman (1993)

$$Z = 6.567X1 + 3.26X2 + 6.72X3 + 1.05X4$$

= Z

= (X1)

= (X2)

= (X3)

= (X4)

Ü1.10 LJƵ Ǵnj! Ƶ Ɨdžöp ýlǩ Ɨǂ ƧT ǐǕ ƧǷƶǩǁ! Ƨöǂǂ ýǴdžǩơf ǁǴǈǋ LJǅ Altman ƧǂǩƵǫĂ

LJdžč ýưĂ Ŏ5 Ƨǂǩƶǩ ǴnjǈƎ5 2.60 LJƵ Ǵnj! Ƶ Ɨdžöp þöƨǩ ƗǂƧT ǐǅ LJƎ5 ǁ!Ʀ LJdž ƩǂƶǃfǏǁƵĂ

ƗöþǴdžƧ!f Ɨ!ƱǈdžǃfLJdžư Ƨǂǩƶǩ ǴnjǈƎ5 2.60 Ă 1.10 LJöǂ ƘƶpĂ LJǫ ǴdžǅÜƗƪǁƽdž Ƨǂǩƶǩ ŬĂ Ǵö!Ǵdž

ǏǁƵ ǴnjǩƧþp ăþdžĂ ÜǴnjƱǴTǈ ăĂǩƪdž ǏǁƵ ǚǂlǩƪdž Ǵnjƽöǈ Ʈǩ þdžǩƶö Ŏǩ!f ƗɳƧơ!f Ɨ!Ʊǈdžǃfǐǅ

.Ǵnj5fþNjǅ ƭölơǩ Ŏ5 ƘǁT5 ýǴơ Ŏ5 ƩǚƼŰfƗ!Ʊǈdž Ŏ5 Ǵnj!ĂƤþ Ăǅ ƟǴɳǈ!f ýǂƪ ƭölơǩ

þþùƶǩdž!f ƨöǴùdžǩ!f ýöǁơǩ DžþƤǩƪƎǂ ƘǴǂƧT!f ƩǚƼƎǂ ƋǂǈǩǁǴǂ Ƙdžǩǋf Ŏǩ!f ƘǴƪfƧþ!f LJdžĂ

ƘǴǂƧùT!f ƩǚùƼǫ ƋǂǈǩǂƭǁƶǩǩăƧƤǅƗöƧƱǈƟƧǩpfƦǫ (1972) Deakin Ǌǂ DžǴp Ǵdž (MDA)

ƧfƧùǂǩ Ŏù5 ǊǁdžƵ fƤǁǩöĂ .(1968) Altman Ă (1966) Beaver ŎɳƦĂdžǈ LJdž lþdžǩƪdž

ÜlƨǴùǩdždž ƩǚƼŰǴùǂ ƗùöƋǂǈǩ!f ǴnjǩƧþp Ƨǂǩƶǩ Ɨö!Ǵdž Ɨǂƪǈ 14 ǏǁƵ þdžǩƵf Ɨöơ Beaver ǲƦĂdžǈ

Ɨùö!Ǵdž!f ƔƪǈǃfýǂDžfþƤǩƪfƭöƧƱ LJƵ LJǴdžǩ!ǅƗöƧƱǈƗơƮǂ ƧƛǂǅǏlǩƧf ǊǈƎ5 Üǁ!ƦǏ!ǫ Ɨ5Ǵưǫ

DžǴùp þùpĂ .ƗɳƧơ!f Ɨdžöl!f LJdž Ŭþǂ Ɨö!ǴdžǩơŰf ƩǴƪǅ DžfþƤǩƪǴǂ DžǴpĂ Beaver ǴnjöǁƵ þdžǩƵf Ŏǩ!f

ƗǂƧùT!f DžùɳơǏùǁƵ fǴǴùǈǂ Ɨƪǁƽdž!f ƧöƺĂƗƪǁƽdž!f ƘǴǂƧT!f LJdž ǴöƒfĂTƵ ƗǂƧT 32 ƧǴǂǩƤƎǂ

ǇƑǴùǩǈǁ! ƧùöƺǩdžǃfǐþǴùơǅǚöǁơǩ Ǵnjö5 DžþƤǩƪfÜ (1970 - 1964) LJdž lƧǩ5!f ýǚƤ ƳǴƱl!fĂ

LJùdž LJöþ!f Ŏ!Ǵdžɳǫ Ǐ!ǫ ǐþlǈ!f ƭ5þǩ!f Ɨǂƪǈ DžþƤǩƪfĂ Ü(1966) Beaver ǇƑǴǩǈ LJdž ƗɳƧƤǩƪdž!f

lfþǅ ýùư5ǅ Ƨùǂǩƶǩ ƗǂƪǈǃfǈƦǋ ǨǅǏ!ǫ ýǸƮĂǩĂ ÜƗǁǷǴdžǩdž!f ƘǴɳƧƤdž!f ƘfƦ ǇƑǴǩǈǃfƧöǈƮǩ ýɳǅ

ƭùlơ þpĂ .ƩǚƼŰfƗǁơƧdž ƭǂƪǩ ƘfĂǈƪ 5 lƧǩ5 ýǚƤ Ɨƪǁƽdž!f ƧöƺĂƗƪǁƽdž!f ƘǴǂƧT!Ǵǂ Ƌǂǈǩǁ!

Ǐù!ĂŰf ƗǈùƪǁǁƦ %95 Ă Ü%95Ă Ü%97 ƘùƷǁǂ ƋùǂǈǩǃfƘŬþƶdž! ƧöǈƮǩ Ɨpþ ǏǁƵǅǲƦĂdžǈǃf

ǲƦĂdžǈ ǏǁƵ ƘǴǈöƪơǩ!f Ưƶǂ þĂɳĂ Ǐ!ǫ ƧöTö Ǵdždž ÜŎ!fĂǩ!f ǏǁƵ ƩǚƼŰfýǂp ƗǷ!ǴǷ!fĂ ƗöǈǴǷ!fĂ

.ƩǚƼŰfýǂp LJöǩǈƪ! Ʊl5 Ƌǂǈǩ ǐƦ!fĂ (1968) Altman

ǅǻƤƙù ʅƒ ƚŏơ Ü **Kida (1980**) ƝƜ ǅǛƥ Ǥǆ ƘǴǂƧƮ!ƒ Ʃ ǚ5ƎƜ ƋƜǈƙ!ǤƜ ƘǆƙƝǊƒ Ǒƙ!ƒ ƘǴʅƒƧƥ!ƒ ǇǆĂ

: ǑƙǓƒ ƜƦĂǆǈ!ƒ Ɣʅơ Ʃ ǚ5ǗǤƜ ƋƜǈƙ!ƒ Ǒ5 ƚŏ!Ǥǆ Ɣʅǉ ƩǆƤ ƜƦĂǆǈ!ƒ

Z= 1.042 (X1) + 0.42 (X2) + 0.461 (X3) + 0.464 (X4) +0.271 (X5)

:ǇƊ ƚŏơ

.ƒƥŏǂ ƜƦĂǆǈ! ǅǛƶ!ƒ ƧƬƋǆ!ƒ =Z

.ýĂƮǕƒ Ǒ!Ǥǆƞ / ƚƜŏƧư!ƒ ƥƶƜ ýƤƥ!ƒ Ǒ5ǴƮ = X1

.ýƞǕƒ ƖƧŏƮƥĂ ýƞǕƒ ƚƖŏĂƱ ƘǴǆƒƨƙ!ǗǤƜ ƚƖƶƙǆ!ƒĂ ƚǆĂƮƤǆ!ƒ ƘǴ5ĂƧƮǆ!ƒĂ ƥƑĂƽ!ƒ = X2

.12*(ƘǴƶŏƜǆ!ƒ Ǒ!Ǥǆƞ / ƚǉƑƥ!ƒ ǅǆƦ!ƒĂ ƴ5ƥ!ƒ ƽƒƧĂƊ) = X3

.ýĂƮǕƒ Ǒ!Ǥǆƞ / ƘǴƶŏƜǆ!ƒ = X4

.ýĂƮǕƒ Ǒ!Ǥǆƞ / ƚŏƥƖǉ!ƒ = X5

Ƨŏƹ ƘǴǂƧƮ ƧƜƙƶƙ (0.38) Ǉǆ ƧƜǂƊ Ǥǌŏƥ! Z ƚǆŏƥ ǇĂǂƙ Ǒƙ!ƒ ƘǴǂƧƮ!ƒ ƒƥŏǂ ƜƦĂǆǉ ƧǌƱŏĂ

Ɣʅơ ƚʅƖ5ǆ ƘǴǂƧƮ ƧƜƙƶƙ5 (0.38) ǄƵ Ǥǌŏƥ! Z ƚǆŏƥ ýƖƙ Ǒƙ!ƒ ƘǴǂƧƮ!ƒ ǤǆǉŏƜ ÜƚʅƖ5ǆ

.ƜƦĂǆǈ!ƒ

Ă Ǒ!ǤǆƙơǕƒ ýŏƖơƙ!ƒ ǅƒƥƤƙʅǤƜ ƘǴǂƧƮ!ƒ Ʃ ǚ5ƎƜ ƋƜǈƙ!ǤƜ ƘǆƙƝǊƒ Ǒƙ!ƒ ƘǴʅƒƧƥ!ƒ ǇǆĂ

Ʃ ǚ5ƎƜ ƋƜǈƙƖ! ƜƦĂǆǉ ƧŏĂƱƙ Ǐ!ƍ ƚʅƒƧƥ!ƒ Ƙ5ƥǋĂ Ü **Ohlson (1982**) ƝƜ ǅǛƥ Ǥǆ ǑǆƙŏƧǴƹĂƖ!ƒ

ǎĂƙơƒ Ü ƜƦǤǆǉ ƚ ǚƛ Ǐ!ƍ ƜƦĂǆǈ!ƒ ǅǸʅƥ ƥƥĂ Ü Ʃ ǚ5Ǘƒ ƚǉʅ ƫƜʅƙ ƘƒĂǉʅ ƚ ǚƛ ýƜƥ ƘǴǂƧƮ!ƒ

ƘǴǉǤŏƜ Ǒǉƛ!ƒ ƜƦĂǆǈ!ƒ Ǒ5 ǅƥƤƙʅƒĂ Ü Ʃ ǚ5Ǘƒ ƚǉʅ ƫƜʅƙ Ǒƙ!ƒ ƚǉʅ!ƒ ƘǴǉǤŏƜ ǏƖƵ ýĂǕƒ ƜƦĂǆǈ!ƒ

Ǒƙ!ƒ ƚƛ!ƛ!ƒ ƚǉʅ!ƒ ƘǴǉǤŏƜ ƚ !ƛ!ƒ ƜƦĂǆǈ!ƒ Ǒ5 ǅƥƤƙʅƒĂ Ü Ʃ ǚ5Ǘƒ ƚǉʅ ƫƜʅƙ Ǒƙ!ƒ ƚŏǉƛ!ƒ ƚǉʅ!ƒ

ƥƥĂ Ü ƚ !ƛ!ƒĂ Ǒǉƛ!ƒĂ ýĂǕƒ ƜƦĂǆǈ!ƒ Ǒ5 ƚƖƙʅǆ ƘƒƧŏƺƙǆ ƚƶʅƙ ǅƥƤƙʅƒĂ Ü Ʃ ǚ5Ǘƒ ƚǉʅ ƫƜʅƙ

[illegible] (Multiple Logistic Regression) [illegible]

[illegible] 105 [illegible]

[illegible] (1976-1970) [illegible]

[illegible] (Over the counter market) [illegible]

2,058 [illegible]

[illegible]

[illegible] 85.1% [illegible]

[illegible] 82.6% [illegible] 87.6% [illegible]

.(Multicollinearity) [illegible]

[illegible] **Shirata** [illegible](**1998**) [illegible]

[illegible]

[illegible]

.1 [illegible] (Multiple Discriminant Analysis)[illegible]

[illegible]

.(Quadratic Model and Non-parametric Model) [illegible]

.2 [illegible]

. [illegible]

[illegible] (61) [illegible]

[illegible]

(520)

$$Z=0.014X1 - 0.058X2 - 0.062X3 - 0.003X4 + 0.7416$$

= Z

= X1

= X2

12 *( ) = X3

= X4

.1

1.

2.

(86.14%)

(0.38) Z (0.38)

(0.38) Z

[illegible]

[illegible] (1968) Altman [illegible] (1966) Beaver [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

.(2007[illegible]) [illegible]

6.2 [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] 2011 [illegible] %41 [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

: (2012 [illegible]) [illegible]

ƘǁƑƙǁƐ üƬƺǁƐ

ƕƨƐƥƢǁƐ ǀƑĬƓƣƈ

ƗǆƥǀǄ 1.3

ƗǀƕƓƮ!ƒ ƘƓƮƒƧƥ!ƒ 2.3

ƗǀƕƓƮ!ƒ ƘƓƮƒƧƥ!ƒ ǇƵ Ɨő!ƓƠ!ƒ ƗƮƒƧƥ!ƒ ƨőǆő ƓǄ 3.3

1.3 [illegible]

[illegible]

2.3 [illegible]

1.2.3 [illegible]

[illegible] (2011) [illegible] (2008 [illegible] 2000) [illegible] (Multiple Discriminant Analysis) [illegible]

[illegible] (2004) [illegible]

[illegible]

[illegible] (24) [illegible]

[illegible] (12) [illegible] (12)

.(2000 [illegible] 1993) [illegible]

[illegible] (2001) [illegible]

[illegible] 23 [illegible]

[illegible] .(1997-1992) [illegible]

[illegible]

.(%100) [illegible]

[illegible] (1995) [illegible]

27 [illegible]

[illegible] 12 [illegible]

(Linear Discriminant Analysis)ǑƠƤ!ƒ ĭ ƨŏďǆ!ƒ ýŏǁơƙ!ƒ Džƒþ ƤƙƪǤǜĂ .(1996-1992)

Ǒ5 %64Ă %75Ă %50 ƖƧƛƶƙďž!ƒ Ƨŏƹ ǁĂǈǜ!ƒ ƨŏŏďǆ Ǒ5 ǋƙpþ ƘƷǁǜ ƜƦĂďǈ Ĭ!ǫ ýƬĂƙ!ƒ Džƙ

.Ǒ!ƒĂƙ!ƒ ĬǁƵ ƧƛƶƙǨ ýǜp Ĭ!ĂǕƒĂ ƚŏǈǤƛ!ƒĂ ƚƶǜƒƧ!ƒ ƚǈƪ!ƒ

ĬǁƵ ǇǤďǆ!ƒ ƜƦĂďǈ ƭŏǜƠƙǜ "ýƬƽ!ǤǜƋǜǈǆ!ƒ ƘǤŏǤƷ! Ǒ!Ǥďž!ƒ ýŏǁơƙ!ƒ " (1993) ÛŶƐ ƣǤƳ DžǤpĂ

.(1985-1982) ƘƒĂǈƪǁ! ǤǌƑƒþ Ǒ5 ƚƙĂǤƽƙďž ƚŏǈþƧ ƚŏƵǤǈƬ ƚǂƧƬ 14 Ǉďž ƚǈĂǂďž ƚǈŏƵ

Ǥďžǂ .ƘǤǂƧƬ!ƒ ýŏďžƞ! DžǤƵ ýǂƬǜ Ƶ ƚďžŏp ƯǤƽƤǈƒ ƚƪƒƧþ!ƒ ƘƧǌƯ þpĂ .1985 DžǤƶǁ! ƚŏǈþƙďž

ƨŏŏďǆ!ƒ ƳǤƠƙƪƒ ƚŏơ ƚŏǈþƧǕƒ ƘǤǂƧƬ!ƒ ĬǁƵ ǇǤǂďǆ! ƜƦĂďǈ ƭŏǜƠƙ ƚŏǈǤǂďǫ ƚƪƒƧþ!ƒ Ƙǈŏǜ

. ƯƽƤǈďž!ƒ ǤƒþǕƒ ƘƒƦ ƘǤǂƧƬ!ƒĂ þŏƞ!ƒ ǤƒþǕƒ ƘƒƦ ƘǤǂƧƬ!ƒ Ǉŏǜ ƖǤǤƽǂǜ

ƚùďžǤƶ!ƒ ƚďžǋǤùƪďž!ƒ ƘǤǂƧùƬ!ǤǜƋǜǈǆǁ! ƚŏ!Ǥďž!ƒ ƔƪǈǍ!ƒ Džƒþ Ƥƙƪǫ " (1989) Û Ƨ ǏǅƇ Ǉǂďž ƙĂ

Ĭ ùǁƵ Ƨþǜp ƜƦĂďǈ Ĭ!ǫ ýƬĂƙ!ƒ Ǉďž " ǤơǤƞǈ ýpǕƒ ƘǤǂƧƬ!ƒĂ ƟǤƞǈ!ƒ ƚŏ!ǤƵ ƚŏǈþƧǕƒ ƚŏƵǤǈƬ!ƒ

ƧĂùƠ Ǒƙ!ƒ ƚǈƪ!ƒ Ǒ5 %91 ƘƷǁǜ ƚpþǜ ǤơǤƞǈ ýpǕƒ ƘǤǂƧƬ!ƒĂ ƟǤƞǈ!ƒ ƚŏ!Ǥƶ!ƒ ƘǤǂƧƬ!ǤǜƋǜǈǆ!ƒ

Ǉďž ư ƙŏĂ .Ǒ!ƒĂƙ!ƒ ĬǁƵ ƚǁǜǤƪ!ƒ ƘƒĂǈƪ!ƒ Ǒ5 %96 Ă %78 Ă %85 Ă %81 Ă ƜƦĂďǈ!ƒ Ǥǌŏ5

:ƚŏ!Ǥƙ!ƒ ƚŏ!Ǥďž!ƒ ƔƪǈǍ!ƒ ƜƦĂďǈ!ƒ

- ƚǜƪǈ ƚƬơ Ĭ!ǫ ƟǤǜƧǕƒ Ǉďž Džǌƪ!ƒ Ƨƶƪ!ƒ ĬƵ ǑpĂƪǁ! Džǌƪǁ! .
- ƚǜƪǈ ƚƬơ Ĭ!ǫ ǑpĂƪǁ! Džǌƪ!ƒ Ǉďž ƟǤǜƧǕƒ þƶǜ ư Ƨ!ƒ ƚǜŏƧ .
- ƚǜƪǈ ƘǤƶŏǜďž!ƒ Ĭ!ǫ ƠƪĂƙďž ƩDžƩ ýǤďž!ƒ ýďžǤƶ!ƒ .
- ƚǜƪǈ ƩDžƩ ýǤďž!ƒ ýďžǤƶ!ƒ Ĭ!ǫ ƭĂǀơ ǇǋďžǋǤƪďž!ƒ .
- ƚǜƪǈ ƠǜƧ!ƒ ýǜp ƽǂƒþĂ!ƒ ư Ƨƒǂ Ɣ Ĭ!ǫ ƘǤƶŏǜďž!ƒ.
- ƚǜƪǈ ďžƞďž ý ƠǜƧ!ƒ Ĭ!ǫ ƘǤƶŏǜďž!ƒ .
- ƚǜƪǈ ƚƬơ Ĭ!ǫ ƘǤƶŏƨĂƙ!ƒ Ǉďž Džǌƪ!ƒ Ƨƶƪ!ƒ ĬƵ ǑpĂƪǁ! Džǌƪǁ! .

- [illegible] .

- [illegible] .

[illegible] (46) [illegible] (1982-1986).

[illegible] (1987) [illegible] " [illegible] " [illegible] (1985-1983) [illegible] 30 [illegible] (Multiple Linear Discriminant Analysis) [illegible] : [illegible] .

ƕǐǦǆƜǓƐ ǀƑƨƐƥƣǁƐ 2.2.3

" Bankruptcy Prediction Model by (**2013**) **Jouzbarkand *et al.,*** ƊǦùƿ

Σ ǚ5ƎùƗ ƌƕǉǩ!ƒ ƗƪƒƧƥƗ Ohlson and Shirata Models in Tehran Stock Exchange"

ƜƦǍùǆǉǍ (Ohlson) ƜƦǍǆǉǰ ýǚƤ ǇǆǆǇ Ü Ŏ!Ǧǆ!ƒ ǇƒƧǒƒ ƽǍƪ Ŏ5 ƗηƧƥǆ!ƒ ƗǒǉƒƧǒǛƒ ƘǦƗƧƬ!ƒ

ƒ ùơƽƗ ǇǍǆơǦùƗ!ƒ ƊǦƿ ƸƥƞǰƒƦǈ ƽǒǀơǩ!Ǎ Ü Ŏǩƪ ηǍǩ!ƒ ƧƒƥơǉǛƒ ƗǒƧƠ ƊƒƥƤǩƪƎƗ (Shirata)

ƊƒƥƤǩùƪƒ ýǚƤ ǇǆǆǇ Σ ǚ5ǛǦƗ ƌƕǉǩ!ƒ Ǐ!Ƶ (Shirata) ƜƦǍǆǉǍ (Ohlson) ƜƦǍǆǉǰ ǀƧƥƿ ƗǉƧǦǀǆǍ

ƗǉǒƵ Ǐ!Ƶ ƗƪƒƧƥ!ƒ Ƙ!ǆƬ ƥƿǍ Ü Ɨƪ!ƽǆ!ƒ ƘǦƗƧƬ!ƒ ƥǒƥơǩ! ǐƥǦƮǩƿǛƒ ǇǍǉǦǀ!ƒ ǇǆǆǇ "141 ǀƧǀƽ!ƒ"

ýùƪǩ! ƥǩǆǩ ǀƧǩƽ!Ǎ Ɨƪ!ƽǆ ƧǒƸ ƗƗƧƬ 30Ǎ Ɨƪ!ƽǆ ƗƗƧƬ 30 Ǐ!ƒ Ɨǆƪǀǆ ƗƗƧƬ 60 ǇǆǆǇ ƗǉǍƗǆ

ƜƦǍùǆǉǍ (Ohlson) ƜƦǍùǆǉǰ ǀƧƥùƿ Ǐù!ƒ ƗƪƒƧƥ!ƒ Ƙ!ƮǍǩǍ Ü (2011 ǇǉǇ 2003) ƘƒǍǉƪ

.Σ ǚ5ǛǦƗ ƌƕǉǩ!ƒ ýǒƠǩƪǩ ǦǆǈǩƒƧǒƸǩǆ ýƗ Σ ǒ! ǇƗ! Σ ǚ5ǛǦƗ ƌƕǉǩ!ƒ Ǐ!Ƶ (Shirata)

" Bankruptcy Probability and Stock (**2011**) **Apergis *et al.,*** ƊǦùƿ Ǧùǆƫ

Prices: The Effect of Altman Z-Score Information on Stock Prices

ƘǦƗƧùƬ! ƊǈùƪǛƒ ƧǦƶƪƊ ǅƒƥƊ Ǐ!Ƶ ƸƧƶ!ƒ ƸƥǈƗ ƗƪƒƧƥ ǅƒƧηƎƗ through Panel Data"

ƗǉǍƗǆ ƗǉǒƵ ƗƪƒƧƥ!ƒ Ƙ!ǆƬ ƥƿǍ .ƗǒǉǆƨƸ!ƒ ýƪǚƪ! ǦǀƽǍ Σ ǚ5ǘ! ƧǒƗƫ ýǦǆǩơǫ ƥǍηǍ ƧǈǕǩ Ŏǩ!ƒ

ƗƗƧƬ 193 Ǎ Ü Ŏ!Ǧǆ!ƒ ǇƥǉƸ ƽǍƪ ǇǆǆǇ ƗƗƧƬ 279Ǎ ÜŎ!Ǧǆ!ƒ ΣǒƧǦƗ ƽǍƪ ǇǆǆǇ ƗƗƧƬ 197 ǇǆǆǇ

ƗùƪƒƧƥ!ƒ Ƙ!ƮǍǩǍ .(2009 ǇǉǇ 2003) ƘƒǍǉƪ ýƗƪ! ƥǩǆǩ ǀƧǩƽ! Ŏ!Ǧǆ!ƒ ƘƧǍƽƗǉƒƧ5 ƽǍƪ ǇǆǆǇ

ÜƗƗƧùƬ!ƒ Ɗǈƪ Ƨƶƪ Ǎ ǇǦǆǩ!Ɗ ƜƦǍǆǉ! Ǧǀ5Ǎ ƗƗǍƪơǆ!ƒ Z Ɨǆǒƿ ǇǒƗ ŎƗǦηǒǫ ƠǦƗǩƧǫ ǁǦǉǈ ǇƊ Ǐ!ǫ

ǦǈǆǈùƪƊ ƧǦƶùƪƊ ǇǍƗǩ ǦǒǉƥǩǆǇ (Z Ɨǆǒƿ) Σ ǚ5Ǜƒ ƧƬƌǆ ǦǈǒƸ ǇǍƗǒ Ŏǩ!ƒ ƘǦƗƧƬ!ƒ ǇƊ ŎǉƶǒǦǆǆ

Ǧùǆƫ .ǦǒƥƵǦùƮǩ Ǐ ùǉơǉǆ ƊǈùƪǛƒ ƧǦƶùƪƊ ƦƤƌǩ ǦǈƥǉƵ Σ ǚ5Ǜƒ ƧƬƌǆ ǇƪơǩǒǦǆƥǉƵǍ ÜýƿƊ

[illegible]

. [illegible]

" Can Altman Z-score Models (**2009**) **Gerantonis *et al*.,** [illegible] Altman z-) [illegible] Predict Business Failures in Greece?" [illegible] (score [illegible] (Altman z-score) [illegible] (2008 [illegible] 2002) [illegible] (Altman z-score) [illegible].

" The Financial Performance (**2008**) **Prihatni and Zakaria** [illegible] Analysis Using Altman Z-score and It's Effect on Stock Price : Banking [illegible] Sector in Indonesian Stock " [illegible] 18 [illegible] (Altman z-score) [illegible] (2011 [illegible] 2004) [illegible] 5 [illegible].

" Financial Distress Risk and Stock Returns: (**2008**) **Yusof** [illegible]

[illegible] Evidence of the Malaysian Stock Market"

[illegible]

[illegible] (Altman z-Score) [illegible]

[illegible]

[illegible] (2007 [illegible] 2001) [illegible] 194 [illegible]

[illegible]

[illegible]

[illegible]

[illegible] (Systematic Risk)

[illegible]

[illegible] (Systematic Risk)

" Financial Ratios as the Predictor of (**2008**) **Idris** [illegible]

[illegible] Corporate Distress in Malaysia"

[illegible]

[illegible] 53 [illegible] 66 [illegible]

[illegible] (2001 [illegible] 1998) [illegible] 13 [illegible]

[illegible]

[illegible]

"Bankruptcy Prediction for Large and Small (**2004**) **Pongsatat et al.,** [illegible]

[illegible] Firms in Asia: A Comparison of Ohlson and Altman"

[illegible] (Ohlson) [illegible]

[illegible] 60 [illegible] (Altman) [illegible]

[illegible] (2003 [illegible] 1998) [illegible] 60 [illegible]

[illegible]

[illegible]

. [illegible]

"Is the Risk of Bankruptcy a Systematic (**1998**) **Dichev** [illegible]

[illegible] Risk?"

[illegible]

[illegible] .(1995 [illegible] 1981) [illegible]

[illegible] .(1980) Ohlson [illegible] (1968)Altman :[illegible]

[illegible]

[illegible]

[illegible]

.[illegible]

"Information effects and stock (**1981**) **Altman & Brenner** [illegible]

[illegible] market response to signs of firm deterioration"

[illegible].

) [illegible] 54 [illegible] (1963-1945 . [illegible]

[illegible].

3.3 [illegible]

[illegible] Altman [illegible] (1968) [illegible] Beaver (1966) [illegible] (2011) [illegible] Shirata (1998) . [illegible]

(1970) [illegible] (1993) [illegible] .Deakin [illegible] (2011) Apergis [illegible].

[illegible] (2011) Apergis [illegible] إلا أنها تختلف عنها في استخدامها لنموذج شيراتا عوضا عن نموذج ألتمان [illegible] كما أنها طبقت على بيانات مالية خاصة بشركات أردنية ([illegible]).

[illegible]

[illegible]

[illegible] 1.4

[illegible] 2.4

[illegible] 3.4

[illegible] 4.4

[illegible] 5.4

[illegible] 6.4

[illegible] 7.4

[illegible] 1.4

[illegible]

[illegible] 2.4

[illegible] (Cross-Sectional Data) [illegible] (Panel Data) [illegible] .(Time-Series Data) [illegible]

3.4 عينة الدراسة

[illegible] (2011-1990) [illegible]

[illegible] 15 [illegible] (1).

[illegible] (1.4) [illegible] (6) [illegible] (2) [illegible] (4) [illegible]

[illegible] (1.4)

[illegible] (1.4) [illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	1	1	4	1	2	6

[illegible] 4.4

(Independent Variables) [illegible] .1

(Shirata Z-Score) [illegible] :

[illegible]:

$$Z=0.014X1 + 0.058X2 + 0.062X3 + 0.003X4 + 0.7416$$

Z = [illegible]

X1 = [illegible]

X2 = [illegible]

X3 = [illegible] * 12

X4 = [illegible] 1 [illegible]

[illegible] (Z) [illegible] (0.38) [illegible]

(Z) ... (0.38)

(Price-to-Book-value Ratio)

(Price Earnings Ratio)

(Company Size)

2. :(Dependent Variable)

5.4 [illegible]

- [illegible] (SHIRATA) [illegible] (SP) [illegible].
- [illegible] (PE) [illegible] (SP) [illegible].
- [illegible] (PB) [illegible] (SP) [illegible].
- [illegible] (CSZ) [illegible] (SP) [illegible].

6.4 [illegible]

[illegible]:

$$SP_{it} = Shirata\ Z\text{-}Score_{it} + PE_{it} + PB_{it} + CSZ_{it}$$

[illegible]

SP : [illegible]

Shirata Z-Score: [illegible]

PE: [illegible]

PB: [illegible]

CSZ: [illegible]

7.4 [illegible]

[illegible] (Panel Data) [illegible] (Time Series of Cross Sectional Data) [illegible] Pooled Data) [illegible] (Panel Data Analysis) [illegible] Individuals &) [illegible] (Analysis [illegible] (Time Specific Effects [illegible] (Brudel,2005) [illegible] (Time Series Analysis) [illegible] (Cross-Sectional Data) [illegible] (Multicolinearity) [illegible]

.(Gujarati, 2003) (Time Series of Cross Sectional Data)

(Pooled Data)

(Pooled Data Analysis)

(OLS)

Fixed Effect) (Panel Data)

(Model

(Random Effect Model)

(Generalized least Squares)

.(Gujarati, 2003)

Lagrange Multiplier Test (LM)

(Cross-Sectional Variance)

[illegible] (OLS) [illegible]
[illegible] (Hausman Test) [illegible]
[illegible]
[illegible]
[illegible]
(Gujarati, 2003) [illegible]
[illegible] Chi [illegible]
[illegible] (Variance Inflation Factor-VIF) [illegible]
(Breusch-Pagan Test) [illegible] (Multicolinearity)
[illegible] (Heterosledasticity) [illegible]

[illegible]

[illegible]

[illegible] 1.5

[illegible] 2.5

[illegible] 3.5

[illegible] 4.5

[illegible] 5.5

1.5 مقدمة

(Fixed Effect Model) (Random Effect Model) Lagrange)

(Hausman Test) (Multiplier Test - LM

2.5 التحليل الوصفي لمتغيرات الدراسة

(1.5)

:(1.5)

	Mean	Maximum	Minimum	Std. Dev.
Shirata Z-Score	-0.724	0.734	-21.113	3.278
Price Earnings Ratio (Times)	-0.945	153.668	-176.087	14.970
Price-to-Book-Value Ratio (Times)	0.312	41.026	-89.005	2.544
Total Assets	6,156	25,744	1,124	4,412

(1.5)

- نموذج شيراتا (**Shirata Z-Score**)

(-0.724)

(0.38) (-21.113) (0.734)

(3.278)

-1,287,305

-9,672,645 601,457

4,037,504

21,462,818 1,345

1,584,785 0

10,371,365 (2-5)

- نسبة (**Price Earnings Ratio**)

(-0.945) (153.66)

(-176.09) (14.970)

(-387,228) (2,801,980)

(-3,939,908) 61

[illegible] (-0.9449) [illegible] 14 [illegible]

[illegible] (2-5) [illegible]

[illegible]

- [illegible] للأسهم **(Price-to-Book-Value Ratio)** [illegible] (0.312) [illegible] (2.544) [illegible] (41.026) [illegible] (-89.005) [illegible] (0.660) [illegible] (-0.612) [illegible] (3.250) [illegible] (2,534,626) [illegible] (-1,600,127) [illegible] (13,104,833) [illegible] (3,222,363) [illegible] (1,000,000) [illegible] (12,000,000) [illegible] (2-5) [illegible]

- [illegible] (Company Size) [illegible] (6.156) [illegible] (4.412) [illegible] (25.744) [illegible] (1.124) [illegible]

[illegible]

[illegible] (2.5)

[illegible] :(2.5) [illegible]

	Max	Min	Mean
المبيعات	10,371,365	-	1,584,785
الإلتزامات	21,462,818	1,345	4,037,504
الأرباح المدورة	601,457-	9,672,645-	1,287,305-
القيمة السوقية للسهم	3.25	-0.612	0.66
حقوق المساهمين	13,104,833	-1,600,127	2,534,626
الاسهم المكتتب بها	12,000,000	1,000,000	3,222,363
صافي الدخل	2,801,980	-3,939,908	-387,228
إجمالي الأصول	25,744	1,124	6,156

[illegible] .(2011-1990)

[illegible] Microsoft Excel [illegible] .(2.5)

3.5 [illegible]

[illegible]

[illegible] (Multicolinearity) [illegible]

[illegible]

[illegible]

[illegible]

[illegible] .(Gujarati, 2003) [illegible]

Ƙŭďǅùƶď! ƒþùƞ Ɩƨŏŀ ŧŏƨǅŏƶď ƇƇƱƤƒ þĂƞĂ Ĭ!ƒ ïþƋŏ ƒƦǋĂ ƨƒþơǉŰƒ Ƙŭďǅƶď ƨƒƨƖķƪƒ ĎþƵ

Ŏù5 ŧǁŧùƬď!ƒ ǉƦùǋ Ďŏŏlķ!Ă . ƨ5Ʈ ŧďŏp ǇƵ ǅŏƑǅƮơ ǅǌ5ŭķƤƒ ĎþƵ Ĭ!ƒ ïþƋŏ ǅďď ÜƨƒþơǉŰƒ

ŧƞƨþ Ǉŏŀŏ ïƦ!ƒĂ (Variance Inflation Factor - VIF) ƨǅŀķƤ ƨǅŏķƤ Ďķ ŧŏ!ǅơ!ƒ ŧƪƒƨþ!ƒ

Ŏù5 ǊŏǁƵ þǅďķƵŰƒ Ǉŧďŏ ĎǅƵ ƨǅŏƶďŧĂ Ü ăƨƤŰƒ ŧǁŀķƪď!ƒ Ƙƒƨŏƺķď!ǅ ýŀķƪď ƨŏƺķď ýŧ ƨŏƪ5ķ

Gujarati,) þþùƶķď ƱǅŀķƨƒþĂƞĂ Ĭ!ƒ ƨŏƬŏ ƒƦǌ5 VIF>10 Ǉǅŧ ƒƦ ǊǉŀýĂ!ƒ Ǉŧďŏ ƨŏƪ5ķ!ƒ

Ƙƒƨùŏƺķď!ƒ ýŏďƞ! VIF ƱƪĂķď Ǉƒ Ĭ!ƍ ŧƪƒƨþ!ƒ Ŏ5 VIF ƨǅŀķƤ ǋƑǅķǉ ýŭƤ ǇďĂ . (2003

Ĭùǁ Ƶ ýþùŏ ǅďď Ü 1.03 ŧďŏp ĬǉþƊĂ 1.58 ŧďŏp ĬǁƵƊ Ǉŏŀ VIF ŧďŏp ƘơĂƒƨķĂ Ü 1.30 ƹǁŀ

Variance Inflation ŧùďŏp (3.5) Ďpƨ ýĂþƞ!ƒ ƨǌƱŏĂ .þþƶķď!ƒ ƱǅŀķƨŰƒ ŧǁŧƬď þĂƞĂ ĎþƵ

.Factor

Variance Inflation Factor ŀƊǅǐ5 (3.5) !5þ üǋƣƜǁƐ

VIF	þǐƹŧƊǅǁƐ !ƨƋ
1.58	(SHIRATA) ǅķƒƨŏƬ ƜƦĂďǉ! ĎǅƶƖƒ ƨƬƋď!ƒ
1.52	(PE) ƟǅŀƨŰƒ Ǉď ĎǌƪƖƒ ŧƮơ Ĭ!ƒ ŧŏpĂƪ!ƒ ŧďŏl!ƒ ŧŀƪǉ
1.08	Ďǌƪŭ! (PB) ŧŏƨķ5þ!ƒ ŧďŏl!ƒ Ĭ!ƒ ŧŏpĂƪ!ƒ ŧďŏl!ƒ ŧŀƪǉ
1.03	(CSZ) ŧŧƨƬ!ƒ Ďƞơ
1.30	VIF ŧďŏp ƱƪĂķď

ƨǅùŀķƤ ŧƪƒƨþ!ƒ ƘďþƤķƪ Ü (Error Term) ƋƱƤ!ƒ ýďǅƶď Ǉŏǅŀķ Ʃǉǅƞķ ăþď ƨǅŀķƤŰĂ

(Heteroskedasticity) Ǉŏǅŀķ!ƒ Ʃǉǅƞķ ĎþƵ ŧǁƬď ǇƵ ƻƬŧǁ! (Breusch-Pegan Test)

ƔĂǁùƪƊ ĎƒþƤķùƪŀ ƨƒþùơǉŰƒ Ƙŭďǅƶď ƨŏþlķ Ŏ5 ƋƱƤ!ƒ ýďǅƶď ĬǁƵ ƨǅŀķƤŰƒ ƒƦǋ ýďƵ Ďķ Ü

ŧùƪƒƨþ!ƒ ǅùǌŀ ƘƞƨƤ Ŏķ!ƒ ǋƑǅķǉ!ƒ Ƙǉŏŀ Ʀƍ Ü (Pooled Data Analysis) Ŏƶŏďƞķ!ƒ ýŏǁơķ!ƒ

[illegible] 26.97 [illegible] Chi´ [illegible]

[illegible] %5 [illegible]

. (Error Term) [illegible]

[illegible] 4.5

[illegible]

[illegible] (Pooled Ordinary Least Square) [illegible]

(Random Effect Model) [illegible] (Fixed Effect Model) [illegible]

(Time [illegible]

[illegible] (Hausman Test) [illegible] Serios of Cross Sectional Data)

. [illegible] (Lagrange Multiplier Test)

[illegible] 5.5

Panel Data) [illegible] (4.5) [illegible]

Lagrange) [illegible] (Pooled Data Analysis) [illegible] (Analysis

[illegible] Chi´ [illegible] (Multiplier Test [illegible] LM)

Cross [illegible]) [illegible] %1

[illegible] (Sectional Variance

[illegible] (Individual & Time Specific Effects)

[illegible] (Hausman Test) [illegible]

جدول رقم (4-5) : نتائج تحليل نموذج الدراسة لعينة الدراسة كاملة

		Pooled Data		**Fixed Effect Model**		**Random Effect Model**
Constant	Prob.>t	(0.052)	Prob.>t	(0.282)	Prob. >Z	(0.156)
	Coef.	-3.365	Coef.	-6.426	Coef.	-3.742
Shirata Z-Score	Prob.>t	(0.047)	Prob.>t	(0.073)	Prob. >Z	(0.047)
	Coef.	-0.0549	Coef.	-0.0434	Coef.	-0.045
Price Earnings Ratio (Times)	Prob.>t	(0.014)	Prob.>t	(0.020)	Prob. >Z	(0.008)
	Coef.	0.211	Coef.	0.204	Coef.	0.201
Price Book Value Ratio (Times)	Prob.>t	(0.000)	Prob.>t	(0.000)	Prob. >Z	(0.000)
	Coef.	-.395	Coef.	-0.306	Coef.	-0.322
Total Assets	Prob.>t	(0.054)	Prob.>t	(0.298)	Prob. >Z	(0.175)
	Coef.	0.22	Coef.	0.409	Coef.	0.235
F-Statistic	Prob.>t	17.55	Prob.>t	9.87	Prob. >Z	53.17
	Coef.	(0.0000)	Coef.	(0.0000)	Coef.	(0.0000)
Observations (n)	# Obs.	73	# Obs.	73	# Obs.	73
LM Test / Chi²		26.97				
		(0.0000)				
Hausman Test / Chi²		5.74				
		(0.2198)				
R-sq		0.4529				

[illegible] (4.5) [illegible]:

- [illegible] %10 [illegible] (SP) [illegible] (Shirata Z-Score) [illegible] (-0.043) [illegible].
- [illegible] (PE) [illegible] **Price**) [illegible] %5 [illegible] **(Earnings Ratio** [illegible] (**Price Earnings Ratio**) [illegible] (0.204) [illegible]

[illegible]

[illegible] 73 [illegible] %72.6 [illegible] 53 [illegible]

- [illegible] (PB) [illegible] %1 [illegible] **(Price-to-Book-Value Ratio)** [illegible] (SP) [illegible] (PB) [illegible] (-0.306) [illegible]

- [illegible] (CSZ) [illegible] (SP) [illegible] (CSZ) [illegible] (SP) [illegible] (CSZ) [illegible]

- LJùdž Ƨùŏλǂƕ ýù ư5Ɗ (Panel Data Analysis) ƉƒþƤƙʅƎƕ ýŏǁơƙ!ƒ ƝƑƘƙǈ LJƊ ƚơƓƕ!ƒ þɳĂĂ ƝƑƓùƙǈ ĬǁƵ þƓdžƙƷǗƓƕ ǁ!ƦĂ Ü (Pooled Data Analysis) ƘƓǈƓŏƕǁ! ǑƶŏdžɳƘ!ƒ ýŏǁơƙ!ƒ ƔĂǁʅƊ ĭĂƓùʅŏ Ƨŏþù|ƙ!ƒ ýùdžƓƶdž LJƊ LJǰùƕ ĭƦù!ƒĂ (Lagrangian Multiplier Test-LM) ƧƓƕƙƤƍ þùɳĂ Ü (Hausman Test) ƧƓùƕƙƤƍ ƝƑƓƙǈ ĬǁƵ þƓdžƙƷǗƓƕĂ Ü %1 ăĂƙʅdž þǈƷĂ (26.97) ɯƦĂùdžǈ LJùdž Ƨŏλǂƕ ýư5Ɗ (Fixed Effect Model) ƘƕƓλ!ƒ ƧλǕƒ ɯƦĂdžǈ ƉƒþƤƙʅƍ ǈƊ ƚơƓƕ!ƒ ƚùʅƒƧþ!ƒ ƘƧǌƲƊ ƚŏơ Ü ƚʅƒƧþ!ƒ ýdžƓƶdž Ƨŏþ|ƙ! (Random Effect Model) ǑƑƒĂTƶ!ƒ ƧλǕƒ . (0.2198) Chi´ ùùùù! ƚŏ!Ɠdžƙơƍ ăĂƙʅdž þǈƷĂ (5.74) ĭĂƓʅŏ Chi´ Ƨŏþ|ƙ!ƒ ýdžƓƶdž LJƒ

[illegible]

[illegible]

[illegible] 1.6

[illegible] 2.6

[illegible] 3.6

[illegible] 4.6

1.6 مقدمة

2.6 نتائج وإستنتاجات الدراسة

1. Shirata) (Z-Score

2. (Shirata Z-Score) (SP)

3. **Price**) **(Earnings Ratio**

4. **(Price-to-Book-Value Ratio**)

5. (CSZ)

[illegible]

3.6 [illegible]

[illegible] :

1. [illegible]

2. [illegible] (Water stock) [illegible]

3. [illegible] (Agency Problem).

4. [illegible]

[illegible]

[illegible]

[illegible]

4.6 [illegible]

1. [illegible]

[illegible]

2. [illegible]

[illegible]

[illegible]

3. [illegible]

4. [illegible]

[illegible]

[illegible]

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أولا : المراجع العربية

[illegible] (2007) . " [illegible]

[illegible].

[illegible] (2001) . " [illegible] 41 [illegible]

.106-51 [illegible] 1

[illegible] .(2007) " [illegible]

.40

[illegible] (2004) . " [illegible] 31 [illegible]

.233-209 [illegible] 2 [illegible]

[illegible] .(2011) " [illegible] .19 [illegible]

[illegible] (1987) " [illegible]

[illegible].

[illegible] (1989) [illegible]

[illegible] (1997) [illegible]

[illegible] (2011) [illegible] 13 [illegible]

[illegible] (1993) [illegible] 13 [illegible] 13 [illegible]

[illegible] (1995) [illegible]

[illegible] (1987) [illegible] 14 [illegible] 8 [illegible] 33-66.

[illegible] (2001) [illegible] 23 [illegible] 1 [illegible]

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(1) [illegible]

[illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
1996-2000	[illegible]	17-06-2001	[illegible]	[illegible]	1
1997-2001	[illegible]	28-04-2002	[illegible]	[illegible]	2
1997-2001	[illegible]	23-01-2003	[illegible]	[illegible]	3
1996-2000	[illegible]	25-03-2003	[illegible]	[illegible]	4
1998-2002	[illegible]	22-11-2003	[illegible]	[illegible]	5
1998-2002	[illegible]	12/5/2003	[illegible]	[illegible]	6
1999-2003	[illegible]	20-05-2004	[illegible]	[illegible]	7
1989-1993	[illegible]	30-10-2005	[illegible]	[illegible]	8
1999-2003	[illegible]	18-06-2005	[illegible]	[illegible]	9
2000-2004	[illegible]	23-07-2005	[illegible]	[illegible]	10
2000-2004	[illegible]	10/12/2006	[illegible]	[illegible]	11
1996-2000	[illegible]	16-07-2007	[illegible]	[illegible]	12
1994-1998	[illegible]	9/10/2001	[illegible]	[illegible]	13
1990-1994	[illegible]	22-6-1997	[illegible]	[illegible]	14
1996-2000	[illegible]	16-07-2001	[illegible]	[illegible]	15

Abstract

Al-jahmani, Mohammad Qasem. The Impact of Bankruptcy Probability on the Stock Prices of Jordanian Industrial Corporations: an Empirical Study. Master Thesis, Yarmouk University, 2013. (Supervisor. Dr. Iaad Sartawi and Dr. Ziad Zuraiqat).

This study aimed to test the relationship between the probability of bankruptcy of Jordanian industrial corporations measured by Shirata Z-score and stock prices. To achieve the objective of the study, panel data methodology is used to analyze 5-year financial data prior to bankruptcy for a sample of 15 bankrupted Jordanian industrial corporations.

The study showed a statistically significant negative relationship between bankruptcy probability measured by Shirata Z-score and stock prices. Also, the study found a statistically significant positive relationship between the Price Earnings Ratio and the stock prices, and a statistically significant negative relationship between the Price Book Value Ratio and the stock prices.

In light of these findings, the study recommended that more attention to be paid to the industrial sector since it is one of the vital economic sectors in Jordan. Also, Future research can be conducted on other sectors, and the impact of new variables such as: capital structure, financial performance and competition on the bankruprcy probability and the stock prices can be investigated.

Key Words: Bankruptcy Probability, Shirata-Z score, Stock prices, Panel Data Analysis, Jordanian Industrial Corporations.